



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

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In re Application of:

JEFFREY J. NORMAN AND : February 19, 2004

JAMES A. MAYER

Serial No. 09/912,289 : Group Art Unit 3673

Filed: 07/24/2001 : Examiner: SUNIL SINGH

For: UNDERGROUND WATER RETENTION APPARATUS

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BRIEF FOR APPELLANT

Hon. Commissioner for Patents

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Alexandria, Virginia 22313-1450

Sir:

This Brief is filed pursuant to the provisions of 37 C.F.R. 1.192 and M.P.E.P. 1206.

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REAL PARTY IN INTEREST

Applicants are the real parties in interest.

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

STATUS OF CLAIMS

Claims 1- 30 are pending in the application. Claims 27 - 30 are allowed. Claims 3, 5 -12, and 23 - 26 are objected to. Claims 1, 2, 4, and 13 - 22 have been finally rejected, and accordingly are the only claims under consideration herein. Claims 1, 2, 13 - 15 are rejected under 35 U.S.C. § 102(b). Claims 4 and 17 have been finally rejected under 35 U.S.C. § 103(a).

Claims 1 is an independent apparatus claim and the other claims under consideration herein are dependent claims, either directly or indirectly from claim 1..

STATUS OF AMENDMENTS

Amendment C was submitted after the Final rejection and was not entered. Only claim 1 was to be amended by Amendment C to overcome what is submitted is an erroneous interpretation of the structure of the present invention by the Examiner. The Examiner decided that instead of clarifying the claimed structure, the amendment creates new matter, and accordingly would not enter it.

SUMMARY OF THE INVENTION

The invention described and claimed comprises water retention apparatus 10 for retaining/storing and draining water from property, and for allowing the area above the water retention apparatus to be appropriately used, as for parking vehicles. Figures 2, 3, 4, and 5 best show the basic apparatus 10. The apparatus includes side walls 12, 16, 20 and 24. The side walls are defined as perimeter support elements. A liner 30 is secured to the side walls or perimeter support elements. Several different embodiments of side walls are disclosed. Figs. 3, 8, 11, and 12 illustrate the different side wall or perimeter support embodiments. Similarly, different embodiments of liners are illustrated in Figs. 3, 8, 11, and 12.

The roof structure for the water retention apparatus includes structural tee elements 90 and a coating 100 on the tee elements 90. The structural tee elements 90 are supported by the perimeter support walls.

Water drains into the apparatus 10 by way of conduits 52, 62 and drain pipes 54, 64. Water drains out of the apparatus 10 into dry wells 76, 86 through pipes 74, 84. In Figs. 8 and 9, a pump 170 is shown pumping retained water through a pipe 220 away from the apparatus 110 embodiment.

ISSUES

The issues are as follows:

1. Whether claims 1, 13, and 16 are patentable over U.S. Patent 6,419,421 (Whitfield, Jr., hereafter Whitfield '421) under 35 U.S.C. § 102 (e).
2. Whether claims 1, 2, and 13 - 15 are patentable over U.S. Patent 3,950,252 (Jordan et al, hereafter Jordan '252) under 35 U.S.C. § 102(b).
3. Whether claim 4 is patentable over the Jordan '252 patent in view of U.S. Patent 6,095,718 (Bohnhoff, hereafter Bohnhoff '718) under 35 U.S.C. §103(a).
4. Whether claim 17 is patentable over the Whitfield '421 patent under 35 U.S.C. § 103(a).

GROUPING OF CLAIMS FOR EACH GROUND OF REJECTION

(a) Claims 1, 13 and 16 are grouped together, with claim 1 being an independent claim, and claims 13 and 16 being dependent directly from claim 1.

(b) Claims 1, 2, 13 - 15 and 17 - 22 are grouped together, with claims 2, 13 - 15 and 17 - 22 being dependent claims. Claims 2 and 13 are dependent directly from claim 1. Claim 14 is dependent from claim 13, and claim 15 is dependent from claim 14. Claims 17 and 18 are dependent directly from claim 1. Claim 19 is dependent from claim 18, and claims 20 and 21 are both dependent from claim 19. Claim 22 is dependent directly from claim 1.

(c) Claim 4 stands alone. Claim 4 is a dependent claim, depending directly from claim 1.

(d) Claim 17 also stands alone. Claim 17 is a dependent claim, depending directly from claim 1.

ARGUMENTS

The references used in the rejection of the claims will be discussed in detail before specific arguments against the references and in favor of the patentability of the claims under consideration are discussed.

The Whitfield '421 patent comprises a very small plastic catch basin having a bottom piece 1 and four corner pieces 2 extending upwardly from the bottom piece. Between the four corner pieces 2 are four side plates 3. The side plates 2 are disposed in grooves 4 in the side pieces. The bottom portions of the side plates 2 are disposed against a lip or ledge 6 on the outer portion of the bottom piece 1. A top unit 5 is disposed on the corner pieces 2 and on the side plates 3. The top unit 5 has a lip against which the side plates 3 and the corner pieces are disposed. The side plates may have holes in them through which water drains. The top unit 5 has a relatively large open central area. Through which water drains into the catch basin.

Independent claim 1 includes five means elements, with functions stated for the means. The first element is "perimeter support means for providing structural support." The perimeter support means comprises the side walls, which, of course, extend about the structure and define the outer perimeter of the apparatus.

The Examiner states that the four corner pieces 3 of Whitfield '421 comprise the equivalent structure to the claimed perimeter support means. The Examiner's rationale is that

the top piece 5 sits on the four corner pieces “along its perimeter.” Such reasoning is faulty. The top piece 5 also sits on the top of the side plates. The top piece 5 accordingly is supported by the four corner pieces and by the side plates.

The next element in claim 1 is “liner means secured to the perimeter support means for holding a quantity of run off water.”

The Examiner equates the side plates 3 and the bottom piece 1 with the “liner means.” This reasoning is also faulty. The side plates 3 are a part of the structure which helps to support the top unit 5. They are, in fact, part of the “perimeter support means” for the Whitfield ‘421 structure. Since separate structure and functions are given to the “perimeter support means” and to the “liner means” in claim 1, the side plates 3 cannot perform both functions. The Examiner has ignored this fact by stating that only the four corner pieces comprises the “perimeter support means” in the Whitfield ‘421 structure.

The Examiner points to Fig. 9 of the present invention, indicating that the walls and the bottom comprise the liner means. However, the Examiner ignores the fact that the caissons and L-beams of Fig. 9 are the “perimeter support means” of the Fig. 9 embodiment, and what the Examiner refers to as “applicant’s walls and floors” are actually the “liner means.” However, the “liner means” of the embodiment of Fig. 9 are secured to the caissons and L-beams, as called for in claim 1. Thus, the Whitfield ‘421 structure does not have the two separate structures clearly recited in claim 1 of the present application.

The next element in claim 1 is “means for draining run off water onto the liner means.” This comprises the various openings and conduits or pipes which collect the water from the area served by the present apparatus and by which the water flows into the structure and onto the liner means.

The Whitfield ‘421 structure has an open top unit through which water flows into the catch basin structure. The catch basin structure is so small that the open tops and grates are sufficient for each unit. This structure broadly compares to the “means for draining water into...” of the present invention.

The next element in claim 1 is means for draining run off water from the liner means. The Whitfield ‘421 structure has holes in the side plates. Water drains from one structure to another structure through the side plates. If one concedes that the small plastic catch basin is the structural equivalent of the present apparatus, which applicants do not, the drain holes may be considered as the “means for draining...” of the present invention.

The final element in claim 1 is “roof means disposed on the perimeter support means for covering the perimeter support means and for providing structural support for appropriate usage of the roof means.”

“Appropriate usage of the roof means” in the specification refers to a large area, such as a parking lot. What is “appropriate usage” of the “roof means” of the Whitfield ‘421 structure? The simple answer is that there is no comparable “appropriate usage!” There is in fact no roof structure as the term “roof structure” is used in the present application. The

Whitfield '421 top piece is not a roof structure. The Whitfield '421 top piece 5 compares broadly to the "means for draining run off water onto the liner means" of the present structure. It cannot provide the two separate structures and functions recited in claim 1.

It is respectfully submitted that the analysis of the Whitfield '421 structure by the Examiner is completely erroneous and the rejection of claim 1 and its dependent claims based thereon should be reversed.

It is axiomatic that under 35 U.S.C. § 102 rejection, the reference must have all of the limitations of the claimed structure. There must be identity of invention, and the cited patent (or patents) must include all of the limitations arranged as in the claim(s) under rejection. In re Bond, 910 F.2d 831, 15 USPQ2d 1566, (Fed. Cir. 1990); C.R. Bard, Inc. v. M3 Systems, Inc., 157 F.3d 1340, 48 USPQ2d 1225 (Fed. Cir. 1993); Helifix Ltd. v. Blok-Lok, Ltd., 208 F.3d 1339, 54 USPQ2d 1299 (Fed. Cir. 2000); Brown v. 3M, 265 F.3d 1349, 60 USPQ2d 1375 (Fed. Cir. 2001).

In other words, the anticipating structures must resemble the claimed structure. There is absolutely no resemblance between the claimed structure and the Whitfield '421 structure. The Whitfield '421 patent does in fact not have all of the claimed structural elements.

Next, the Examiner rejects claims 1, 2, 13 - 15 and 17 - 22 on the Jordan '252 patent, under 35 U.S.C. § 102 (b). The Jordan '252 structure comprises a cast concrete upflow filter for a home sewage treatment plant. The Jordan '252 structure is a container 22 having four exterior walls 27, 28, 290, and 30, an inner L-shaped wall 33, and a bottom 24, all of which

are integral with each other. The Jordan '252 structure has many different structural elements involved as the sewage from the home flows into the container and down through a central L-shaped wall 33 to the bottom filter chambers 75 on either side of the central L-shaped wall. From the bottom filtering chambers 75, the liquid waste flows gradually upwardly through apertures or openings 71 in a grating 69 and eventually over weirs on the L-shaped central wall 33 and then outwardly from the apparatus.

The sewage from the home flows into the structure 22 through a pipe 63, and outwardly through a pipe 83.

Access to the interior of the structure 22 is provided by an access riser 92. The access riser 92 has a riser cover 94. The riser 92 extends upwardly from a cast concrete cover 90.

The central wall 33 has a slight taper which is necessary for casting purposes. Likewise, the interior of the structure shows a slight taper, again for casting purposes. Moreover, there is a ledge 70 on which the grating 69 is disposed.

The Examiner ignores most of the structure 22 and states that the cast concrete cover 90 and the access riser 92 comprise the perimeter support means; the liner means comprises the bottom 24 and the walls 27-30; the pipe 63 and the pipe 83 comprise the water inlet and outlet elements; and the riser cover 94 comprises the roof means disposed on the perimeter support means for covering the liner and for providing structural support for appropriate usage of the roof means.

The reasoning of the Examiner is again very flawed. The “perimeter support means” of the Jordan ‘252 structure does not function the same as the perimeter support means of the present invention. Indeed, the element 90 is a cast concrete cover, and the riser 92 is simply a vertical wall for providing access through the cast concrete cover to the inside of the structure 22.

The riser cover 94 is not a roof in any sense of the word! It is simply what it is defined as in the specification: a cover. When the cover is removed, access is provided through the riser 94 to the interior of the structure 22. According to Fig. 2, the riser 92 is centered over the interior wall 33.

With respect to the Jordan ‘252 structure and claim 1, the remarks above for the Whitfield ‘421 patent are again pertinent - very pertinent! Virtually nothing in the Jordan ‘252 structure corresponds to the structure of the present invention as defined in claim 1.

Claim 1 accordingly stands allowed as clearly defining over the Jordan ‘252 structure, and accordingly the claims dependent from claim 1 are also allowable. However, in order to provide full discussion on all grounds of rejection, brief comments will be made on the rejections of the dependent claims on the Jordan ‘252 structure.

For the rejection of claims 2 and 18, the Examiner states that the “perimeter support walls” 90 and 92 of Jordan ‘252 comprise a retaining wall. NO! The cover 90 is not a wall, and the access riser 92 may be considered as a wall for providing access into the structure,

but it certainly is not retaining wall as the term is used in the claim and as defined in the specification.

For rejecting claims 13-15, the Examiner states that the upper side wall portion is disposed at a relatively shallow angle, and that the lower side wall portion is disposed at a relatively steep angle. Again NO! The walls of the Jordan '252 structure are vertical but tapering inwardly slightly because they are cast. The slight taper has nothing whatever to do with the structures of the present invention as defined in claims 13-15, and which are shown in Figs. 3, 5, 8, 9, and 12 of the present application.

For the rejection of claim 19, the Examiner states that the liner means is secured to the vertically disposed retaining wall. This reasoning flies in the face of the present structure. There is nothing comparable to the structure of claim 19 in Jordan '252. Claim 19 is dependent from claim 18. Claim 18 specifies that the retaining wall is generally vertical. Claim 19 then states that the liner means is secured to the vertically disposed retaining wall. The Examiner states that both the horizontal cover 90 and the access riser 92 comprise the retaining wall. The "liner means" of Jordan '252, according to the Examiner, comprises the four walls 27-30. But the walls 27-30 are not secured to the access riser except through the cover 90. Thus, the Examiner's logic is again flawed.

For the rejection of claim 20, the Examiner states that the retaining wall is relatively short, and in the next paragraph, for the rejection of claim 21, the Examiner states that the retaining wall is relatively long. Once again - the logic of the Examiner is flawed. He cannot

have the Jordan '252 structure both ways. The embodiment shown in Figs. 3 and 5 has a relatively short vertical retaining wall. The embodiments of Figs. 9 and 11 have relatively long vertical retaining walls. There is nothing comparable to those walls in the Jordan '252 structure.

For the rejection of claim 22, the Examiner states that the Jordan '252 structure includes stepped retaining walls 90, 92. The Examiner is comparing the stepped walls of the embodiment of Fig. 12 of the present invention to the flat, horizontal cover 90 and the access riser 92. Thus, in the view of the Examiner, the horizontal cover 90 and the access riser 92 may be compared to the several different embodiments of the present invention. Absolutely not!

The reasoning of the Examiner is again flawed - very flawed. The same structure cannot be the equivalent of the several different embodiments clearly described in the specification and illustrated in detail in the drawing figures.

There is no structure in Jordan '252 which may be considered as the equivalent to the perimeter support structure and the liner of the present structure. The roof means of the present invention does not have comparable structure in Jordan '252. The discussion above with respect to the §102 rejection for Whitfield '421 is pertinent also to Jordan '252 and need not be repeated here.

The Examiner has also rejected claims under 35 U.S.C. § 103(a), obviousness. Using only the Whitfield '421 patent, claim 17 has been rejected. Claim 17 is a dependent claim

directly from claim 1. Claim 17 simply recites that the liner means is made of cementitious material. Since claim 17 depends from claim 1, the allowability of claim 1 also renders claim 17 allowable.

Claim 4 has also been rejected under 35 U.S.C. § 103(a) over the Jordan '252 structure in view of Bohnhoff '718. Claim 4 is dependent directly from claim 1, and merely adds a pump to the liner means. Bohnhoff '718 discloses a drainage and storage system for storing liquids beneath the land's surface, such as athletic fields, and recirculates the stored water back to the surface. The structure is completely different from the present structure. However, Bohnhoff '718 includes a pump for recirculating the water back to the surface. However, with claim 1 allowable, as discussed in detail above, claim 4 is also deemed allowable, regardless of the teachings of Bohnhoff '718.

It is respectfully submitted that independent claim 1 is allowable over the cited references. Indeed, the teachings of the prior art are away from the claimed structure. This, in itself, is an indication of nonobviousness. Kloster Speedsteel AB v. Crucible Inc., 231 U.S.P.Q. 160 (Fed. Cir. 1986). It will be noted that none of the cited prior art references deal with the same subject matter as the present invention - namely the storage and disposal of run off water for developed land. The tiny plastic catch basin of Whitfield '421 is not comparable in purpose to the present invention, regardless of the rationale of the Examiner in comparing structures. A tiny nine inch by twelve inch catch basin is simply not

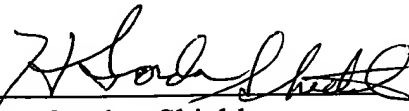
comparable to a water retention apparatus for a shopping mall or the like, where the roof of the water retention apparatus may be used as a parking lot for vehicles.

CONCLUSION

For the reasons given above, it is respectfully submitted that the present invention defines over the prior art and is nonobvious. The rejection of the claims under consideration should be reversed and the application should be passed to issue.

Respectfully submitted,

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APPENDIX

Claim 1. Underground water retention apparatus comprising in combination:
perimeter support means for providing structural support;
liner means secured to the perimeter support means for holding a quantity of run off
water;
means for draining run off water onto the liner means;
means for draining the run off water from the liner means; and
roof means disposed on the perimeter support means for covering the liner means and
for providing structural support for appropriate usage of the roof means.

Claim 2. The apparatus of claim 1 in which the perimeter support means comprises
a retaining wall.

Claim 3. The apparatus of claim 2 in which the means for draining run off water
from the liner means includes a dry well.

Claim 4. The apparatus of claim 1 in which the means for draining run off water
from the liner means includes a pump.

Claim 5. The apparatus of claim 1 in which the perimeter support means includes a plurality of caissons.

Claim 6. The apparatus of claim 5 in which the perimeter support means further includes an L-beam disposed on at least some of the plurality of caissons.

Claim 7. The apparatus of claim 5 in which the plurality of caissons are spaced apart from each other.

Claim 8. The apparatus of claim 7 in which the plurality of spaced apart caissons includes a first row of spaced apart caissons and a second row of spaced apart caissons.

Claim 9. The apparatus of claim 8 in which the perimeter support means includes a first L-beam disposed on the first row of spaced apart caissons and a second L-beam disposed on the second row of spaced apart caissons.

Claim 10. The apparatus of claim 9 in which the roof means comprises a plurality of tee elements disposed on the first and second L-beams.

Claim 11. The apparatus of claim 1 in which the roof means includes a plurality of tee elements disposed on the perimeter support means.

Claim 12. The apparatus of claim 11 in which the plurality of tee elements are disposed adjacent to each other.

Claim 13. The apparatus of claim 1 in which the liner means includes an upper side wall portion, a lower side wall portion, and a bottom portion.

Claim 14. The apparatus of claim 13 in which the upper side wall portion is disposed at a relatively shallow angle.

Claim 15. The apparatus of claim 14 in which the lower side wall portion is disposed at a relatively steep angle.

Claim 16. The apparatus of claim 1 in which the liner means comprises a plastic liner.

Claim 17. The apparatus of claim 1 in which the liner means is made of cementitious material.

Claim 18. The apparatus of claim 1 in which the perimeter support means includes a generally vertically disposed retaining wall.

Claim 19. The apparatus of claim 18 in which the liner means is secured to the vertically disposed retaining wall.

Claim 20. The apparatus of claim 19 in which the retaining wall is relatively short.

Claim 21. The apparatus of claim 19 in which the retaining wall is relatively long.

Claim 22. The apparatus of claim 1 in which the perimeter support means includes a stepped retaining wall.

Claim 23. The apparatus of claim 1 in which the perimeter support means includes a plurality of relatively short stepped retaining walls.

Claim 24. The apparatus of claim 23 in which the liner means is secured to the plurality of relatively short stepped retaining walls.

Claim 25. The apparatus of claim 1 in which the roof means includes a plurality of structural tee elements.

Claim 26. The apparatus of claim 25 in which the roof means further includes a concrete cap disposed on the plurality of structural tee elements.

Claim 27. Underground water retention apparatus comprising in combination:
perimeter support means for providing structural support, including a plurality of spaced apart caissons;

liner means secured to the perimeter support means for holding a quantity of run off water;

means for draining the run off water onto the liner means;

means for draining the run off water from the liner; and

roof means disposed on the perimeter support means for covering the liner and for providing structural support for appropriate usage of the roof means.

Claim 28. The apparatus of claim 27 in which the means for draining run off water from the liner means includes a dry well.

Claim 29. The apparatus of claim 27 in which the means for draining run off water from the liner means includes a pump.

Claim 30. The apparatus of claim 27 in which the liner means comprises a plastic liner.